



CLAIMS

What I claim is:

1. A tack spraying device mountable on a vehicle comprising:
 - a. an engine having an exhaust pipe for emitting exhaust gases during the operation of the engine, the engine being mountable to the vehicle,
 - b. a storage tank for maintaining tack material stored in the storage tank under pressure during operation,
 - c. a first line connecting the exhaust pipe of the engine to the storage tank in a manner to permit transfer of the engine exhaust to the interior of the storage tank and to serve as a source of the pressure within the storage tank, and
 - d. a second line connecting the storage tank to a spray nozzle in a manner to transfer the tack material in the storage tank to the spray nozzle.
2. A tack spraying device according to claim 1 wherein a pressure relief valve is operative attached to said storage tank to relieve the pressure in the storage tank at a pre-determined pressure level.
3. A tack spraying device according to claim 2 wherein the predetermined pressure level is about 4 psig or greater.
4. A tack spraying device according to claim 2 wherein the predetermined pressure level is about 14 psig.
5. A tack spraying device according to claim 2 wherein the predetermined pressure level is set a pressure sufficient to transfer the tack material from the storage tank to the spray nozzle at a rate of at least 0.02 gallons per square yard.

6. A tack spraying device according to claim 5 wherein said rate is between 0.02 and 0.08 gallons per square yard.

7. A tack spraying device according to claim 1 wherein the spray nozzle has an orifice with a nominal diameter of at least 0.375 inches and has a capacity to permit at least 14 gallons per minute of tack material to flow through the orifice at a pressure of at least about 3 psig with a spray angle of at least 75°.

8. A tack spraying device according to claim 1 wherein the spray nozzle has an orifice with a nominal orifice diameter greater than any polymer ball that may develop in the storage tank during spraying of the tack material.

9. A tack spraying device having a tack material storage tank and a line operatively attached to the storage tank and a spray nozzle to permit tack material in the storage tank to flow to and through the spray nozzle, the improvement to which comprises the spray nozzle has an orifice with a nominal orifice diameter greater than any polymer ball that may develop in the storage tank during spraying of the tack material.

10. A tack spraying device according to claim 9 wherein the spray nozzle has an orifice with a nominal diameter of at least 0.375 inches and has a capacity to permit at least 14 gallons per minute of tack material to flow through the orifice at a pressure of at least about 3 psig with a spray angle of at least 75°.

11. A tack spraying device according to claim 10 wherein said capacity is set to permit about 14 to about 140 gallons per minute of tack material to flow through the orifice.

12. A tack spraying device according to claim 1 wherein the engine drives the vehicle.

13. A motorized tack spraying vehicle comprising an engine driven moving vehicle, a tack

material storage tank mounted to the vehicle for maintaining tack material stored in the storage tank under pressure during operation, a first line connecting the exhaust pipe of the vehicle engine to the storage tank in a manner to permit transfer of the engine exhaust to the interior of the storage tank and to serve as the source of the pressure within the storage tank, and a second line connecting the storage tank to a spray nozzle in a manner to transfer the tack material in the storage tank to the spray nozzle.

14. A motorized tack spraying vehicle according to claim 13 wherein a pressure relief valve is operative attached to said storage tank to relieve the pressure in the storage tank at a pre-determined pressure level.

15. A motorized tack spraying vehicle according to claim 14 wherein the pre-determined pressure level is about 4 psig or greater.

16. A motorized tack spraying vehicle according to claim 15 wherein the pre-determined pressure level is about 14 psig.

17. A motorized tack spraying vehicle according to claim 15 wherein the predetermined pressure level is set a pressure sufficient to transfer the tack material from the storage tank to the spray nozzle at a rate of at least 0.02 gallons per square yard.

18. A motorized tack spraying vehicle according to claim 17 wherein said rate is between 0.02 and 0.08 gallons per square yard.

19. A motorized tack spraying vehicle according to claim 13 wherein the spray nozzle has an orifice with a nominal diameter of at least 0.375 inches and has a capacity to permit at least 14 gallons per minute of tack material to flow through the orifice at a pressure of at least about 3 psig with a spray angle of at least 75°.



20. A motorized tack spraying vehicle according to claim 19 wherein said capacity is set to permit from about 14 to about 140 gallons per minute of tack material to flow through the orifice.

21. A motorized tack spraying vehicle according to claim 14 wherein the spray nozzle has an orifice with a nominal orifice diameter greater than any polymer ball that may develop in the storage tank during spraying of the tack material.

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